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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.				
10/551,057	09/26/2005	Kathrin U. Jansen	21188P	1452				
210 MERCK AND CO., INC P O BOX 2000 RAHWAY, NJ 07065-0907	7590 12/21/2006		<table border="1"><tr><td colspan="2">EXAMINER</td></tr><tr><td colspan="2">SALIMI, ALI REZA</td></tr></table>		EXAMINER		SALIMI, ALI REZA	
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			<table border="1"><tr><td>ART UNIT</td><td>PAPER NUMBER</td></tr><tr><td>1648</td><td></td></tr></table>	ART UNIT	PAPER NUMBER	1648		
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1648								
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE					
3 MONTHS		12/21/2006	PAPER					

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/551,057

Applicant(s)

JANSEN ET AL.

Examiner

A R. Salimi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 and 12-40 is/are pending in the application.
- 4a) Of the above claim(s) 12-29 and 33-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 30-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/26/05, 5/1/06</u> . | 6) <input type="checkbox"/> Other: _____  |

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### **DETAILED ACTION**

Claims 1-8, 12-40 are pending.

Raw Sequence Listing have been entered.

Submitted Information Disclosure Statement (I.D.S) is noted.

### ***Election/Restriction***

Applicant's election with traverse of Group I in Paper filed 11/20/2006 is acknowledged.

The traversal is on the ground(s) that the subject matters of Groups I, and II should be examined together. Upon reconsideration, Applicants' argument is persuasive regarding rejoinder of groups I-II. Hence, claims 1-8, 30-32 have been rejoined.

However, regarding the Groups III-IV (12-29, 33-40) the restriction is still deemed valid under PCT Rule 13.2. This portion of the requirement is still deemed proper and is therefore made FINAL.

**Applicants are reminded to cancel the claims to the non-elected claims. Claims 1-8, 30-32 are considered.**

### ***Subject Matter Allowable over Prior art***

Claims 1-8, 30-32 are deemed free of prior art, given failure of the prior art to teach or reasonably suggest the codon optimized nucleotides of HPV-31 L1 as defined by SEQ ID NO: 2, or 3. The closest prior art identified is by Goldsborough et al (Virology, 1989, Vol. 171, pages 306-311). The cited reference taught the nucleotide sequence of human papillomavirus type 31 (HPV-31) including the L1 region (see Figure 2). The said reference did not, however, disclose the nucleic acid of codon modified HPV-31 L1 of SEQ ID NO: 2 or 3 as now claimed, and there

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is no teaching of expression of SEQ ID NO: 2 or 3 in yeast cell in general, or *Saccharomyces cerevisiae* in particular.

Claims 1-8, 30-32 are allowed.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. R. Salimi whose telephone number is (571) 272-0909. The examiner can normally be reached on Monday-Friday from 9:00 Am to 6:00 Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campell, can be reached on (571) 272-0974. The Official fax number is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A. R. Salimi

12/19/2006

AL R. SALIMI  
PRIMARY EXAMINER